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"GRINDING & FINISHING"
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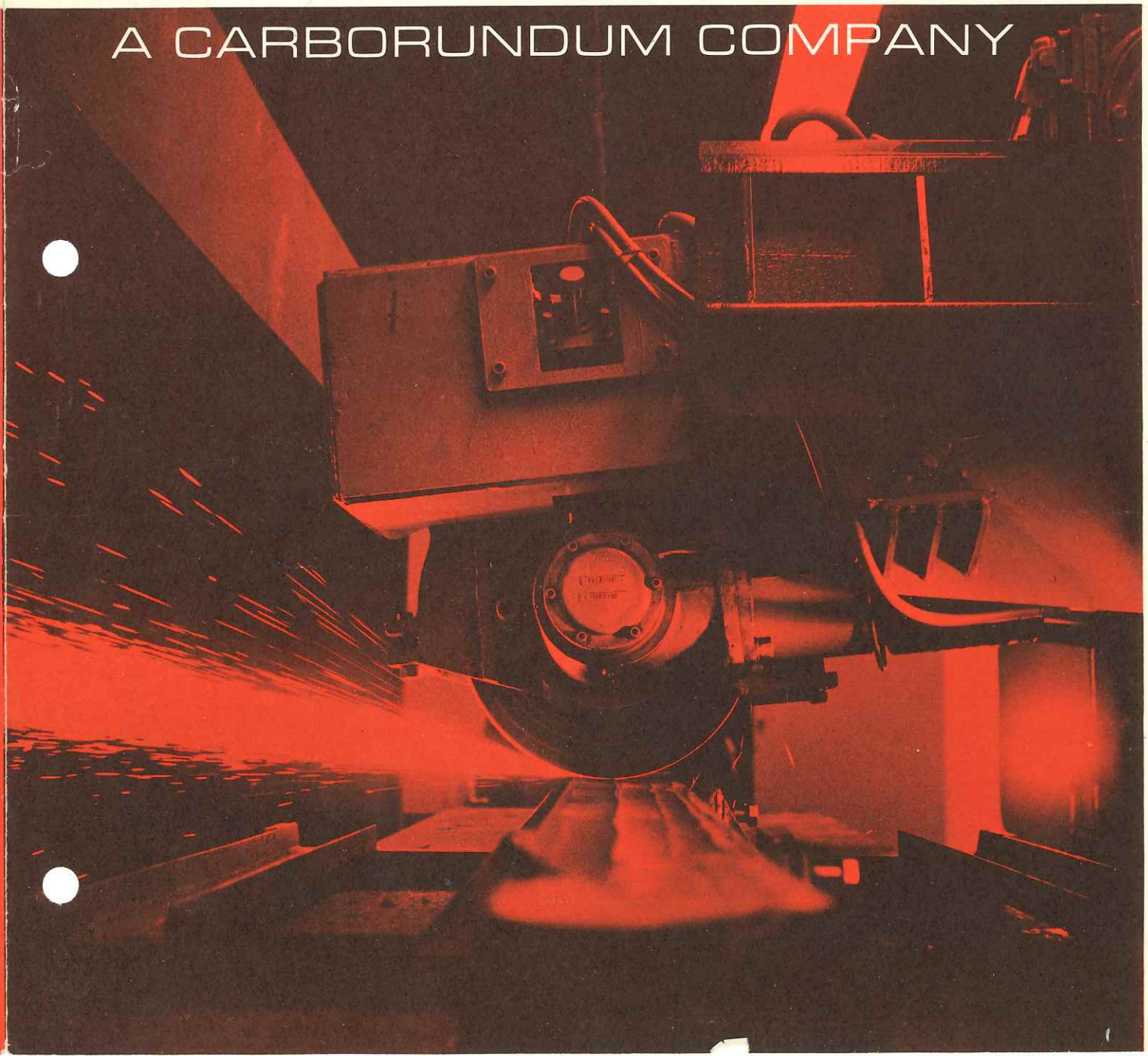
# MARK 100-60 TYSAMAN

## HI-LO PRESSURE BILLET AND SLAB GRINDER

## FOR SLABS UP TO 60" WIDE ANY LENGTH

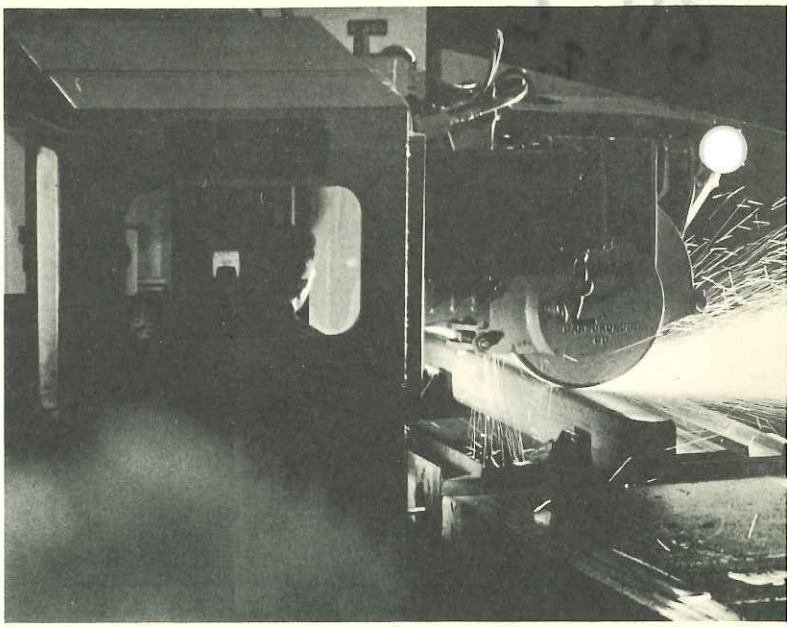
A CARBORUNDUM COMPANY



MARK 100-60 SLAB GRINDER • FOLDER 3061

## CONDITION ALL STEELS—HOT OR COLD

**This one grinder, the Tysaman Mark 100-60, will condition an infinite variety of steels—and do it more economically. The spindle boom can handle billets or slabs up to 60″ wide. Rugged construction, full protection of vital parts permits you to do Hot Grinding with either regular wheels or the new Arborless wheels. The length of slab handled is limited only by the room available for the machine's track. Head pressures are always constant and variable from 50 to 5000 pounds through patented, hydraulic systems. Productivity is high because the Mark 100-60 can travel on its track from 0 to 150 feet per minute. Install it in your existing grinding area at a minimum cost.**



### Two Grinding Pressure Ranges

Two hydraulic systems, under continuous operator control, permits conditioning of any steel: carbon, stainless or any of the new exotic hard steels. Low pressure system controls pressures from 50 to 1400 pounds; high pressure system covers the range 1400 to 5000 pounds.

### Constant Head Pressure

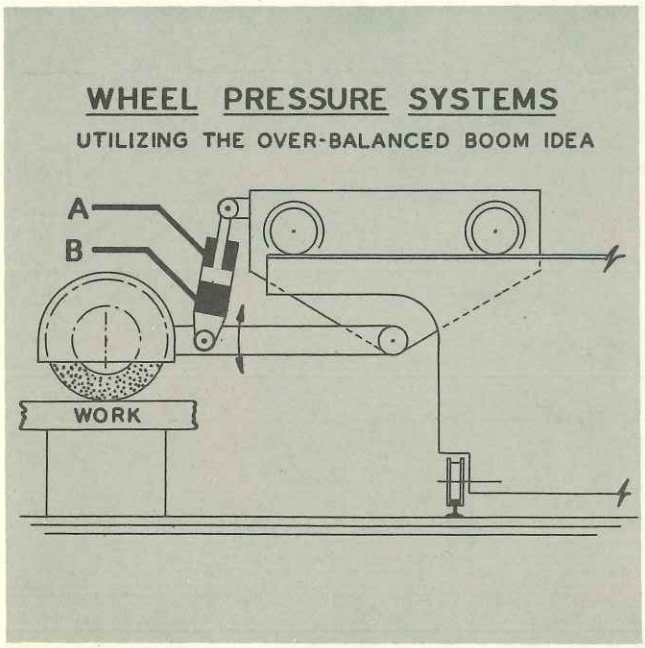
Continuous contact pressure is maintained throughout the 18″ vertical float. This is an exclusive with the Tysaman Mark 100-60, and is achieved by a patented process of subtracting weight hydraulically. The operator can run the wheel off the edge of the slab without dropping below the operating plane.

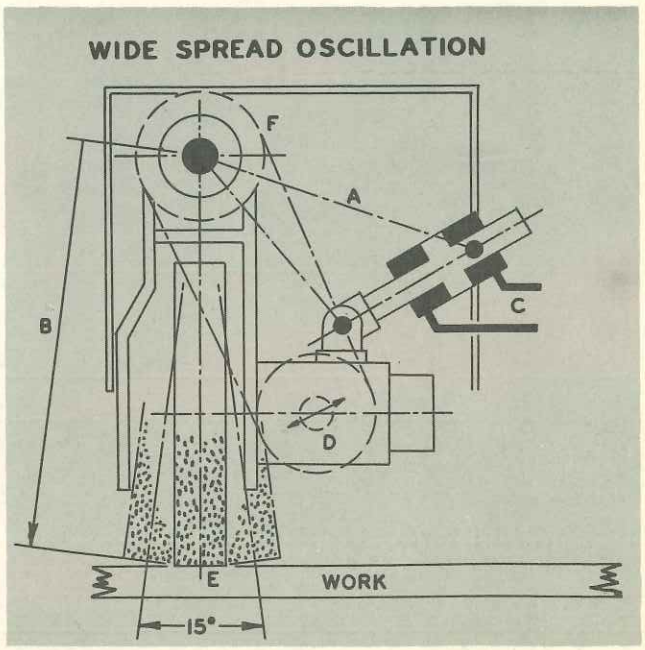
### Two Standard Spindles Available

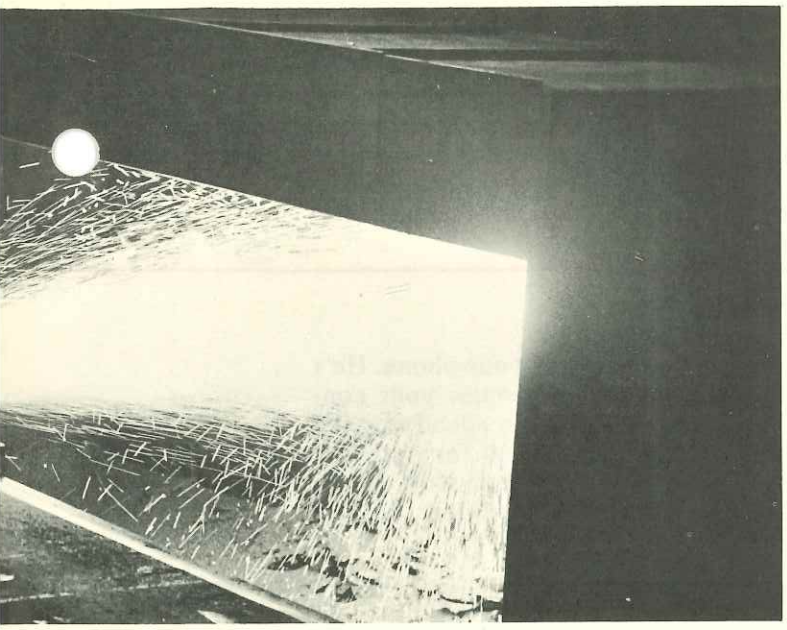
A 90° spiral bevel gear drive spindle can be furnished for either regular grinding wheels operating at 12,500 sfpm, or for the new arborless wheel capable of 16,500 sfpm. The spindle is driven by a 100 hp TEFC motor connected directly to the input shaft of the four speed manual shift transmission. Spindle is adaptable for Hot Grinding operations.

### Wide Spread Oscillation

The spindle and guard assembly are pivoted over the center line of the wheel on a shaft in line with the output shaft of the four speed gear box. This feature allows a wide sweep oscillation through a 15° arc with no twisting of the V-belts.





**Fast Track Travel**

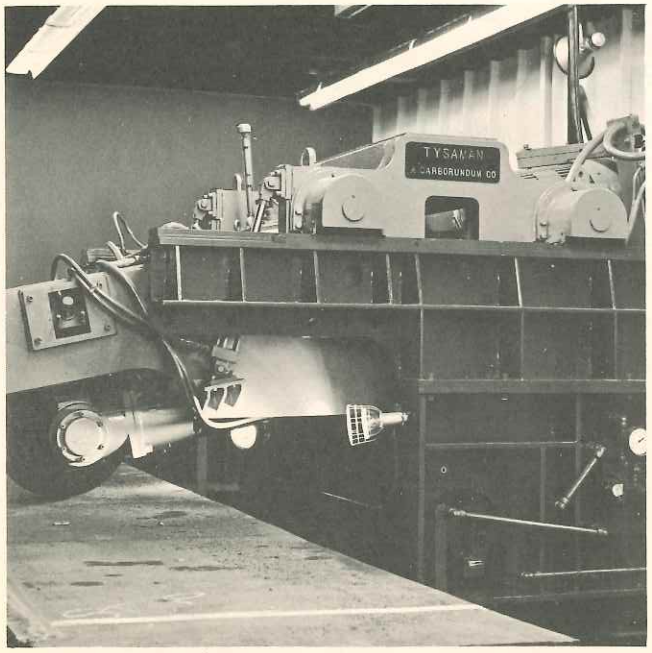
The entire machine is mounted on a track of any length to suit your needs. An infinitely variable hydraulic drive provides track speeds from 0 to 150 feet per minute. Power is transmitted directly from the constant torque radial piston motor to the axles (4-wheel drive) through a multiple strand roller chain.

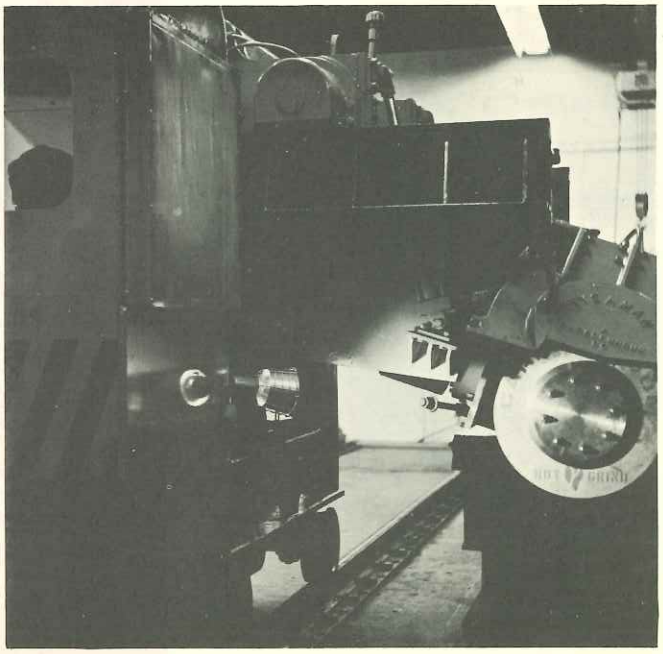
**60″ Boom Reach**

The standard carriage feed across the slab is 60″ without the necessity of outboard support rails. However, with the addition of a high rail at the back of the grinding booth, the cross travel can be increased to 120″ or more. The boom travel is controlled by a horizontal mounted hydraulic cylinder.

**Controls**

The operator's cab is placed very close to the work and wheel to enable the operator, through his safety plate glass window, to always keep the work and wheel under observation. All controls, levers, buttons, start-stop are in the operator's control cab. Speed indicator lights are also provided. The 110 volt electrical control circuit is completely wired at the factory, requiring only connection to power source.



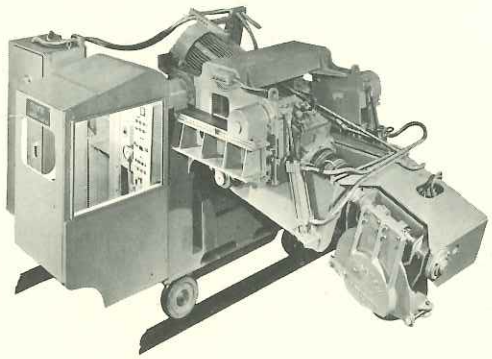
# TYSAMAN

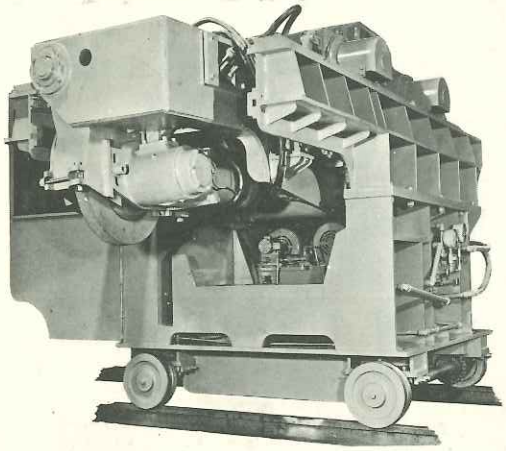
A CARBORUNDUM COMPANY, KNOXVILLE, TENNESSEE

**Engineering Service**

A Tysaman Engineer is as near as your phone. He's ready to sit down with you to discuss your conditioning problems and assist you in specifying the best components of the Mark 100-60 for optimum performance and productivity. Call or wire. There is no charge or obligation for this service.

**Specifications**





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|---|---|
| Main Motor Horsepower | 100 H.P. (150 H.P. Optional) |
| Spindle Speeds | 2025-2225-2380-2550 Standard (12,500 SFM)<br>2550-2750-3100-3450 Optional (16,000 SF |
| Wheel Capacity | 24″ x 4″ x 12″ or arborless |
| Track Gauge | 66″ Standard<br>Others optional |
| Track Speed | 0-150 FPM |
| Grinding Pressure Range | 50-1400 Lb. Low Pressure<br>1400-5000 Lb. High Pressure |
| Material Width Capacity | 60″ without outboard support<br>120″ with outboard support |
| Oscillating Stroke | 15° included |
| Operating Weight | 32,000 lbs. |
| Shipping Weight | 32,500 lbs. |



Printed in U.S.A.